



Declaration of Christine Mack, Ph.D. Under 37 CFR § 1.132

I, Christine Mack, Ph.D., under penalty of perjury, declare as follows:

1. I make this declaration in support of U.S. Patent Application No. 09/499,526. I have personal knowledge of the facts set forth in this declaration, and, if called as a witness, I could and would testify competently to each of the following facts.
2. I hold a B.S degree in Biopsychology from the University of California, Santa Barbara, and a Ph.D. degree in Biobehavioral Sciences, Developmental Psychobiology from the University of Connecticut, awarded in 1989 and 1996 respectively.
3. Since 1991, I have worked in the field of hormone research, and am a named inventor on several patent applications, as well as an author of numerous publications. See my curriculum vitae, attached as Exhibit 1.
4. As a Senior Scientific Investigator in the Discovery Research Department at Amylin, I am responsible for designing research strategies and conducting experiments involving peptide hormones, such as exendin-4 and PYY and PYY analogs, for example.
5. It is generally known that plasma lipid levels, for example total cholesterol levels, are often elevated in individuals with insulin and/or lipid metabolic disorders, such as type II Diabetes Mellitus, glucose intolerance, insulin resistance, hyperglycemia, hyperinsulinemia, syndrome X, obesity, hyperlipidemia and hyperlipoproteinemia.
6. In my own experiments, I have observed that peptide analogs of PYY, such as PYY[3-36], can lower plasma levels of total cholesterol and triglycerides. In one study, diet-induced obese (DIO) rats were treated with either PYY[3-36] at a dose of 67 nmol/kg/day, or with vehicle alone. Total plasma cholesterol levels in vehicle-treated obese rats averaged 90 mg/dl, whereas PYY[3-36]-treated rats exhibited a decrease in total plasma cholesterol levels to 80 mg/dl ($P < 0.05$). Plasma triglyceride levels in vehicle-treated obese rats averaged 403 mg/dl, whereas PYY[3-36]-treated rats exhibited a decrease in plasma triglyceride levels to 282 mg/dl ($P < 0.06$).

7. All statements of my own knowledge made herein are true, and all statements made on information and belief are believed to be true. I understand that, should any of these statements be willful false statements relied upon to assess the patentability of the application at issue, it may jeopardize the validity of said application or any patent(s) issuing thereon.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 19, 2006.

Christine Mack

Christine Mack, Ph.D.